

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No.: 10/603,020
Filed: 06/24/03
Group Art Unit: 3652
Title: CONTAINER TRANSPORTING DEVICE
Examiner:

PRELIMINARY AMENDMENT

Mail Stop Missing Parts

Commissioner for Patents

P.O. BOX 1450

Alexandria, VA 22313-1450

Honorable Sir:

This preliminary amendment is filed in response to the missing parts office action dated September 10, 2003.

IN THE BRIEF DESCRIPTION OF DRAWINGS

The drawings and the accompanying description illustrate the present invention.

FIG. 1 is a perspective side view of one embodiment of the present invention a handcart for transporting water containers.

FIG. 1A illustrates a rear view of one embodiment of the present invention a hand cart for transporting water containers.

FIG. 2 illustrates an exploded view of the handcart holding the water container.

FIG. 3 illustrates a cross-sectional side view of the handcart.

FIG. 3A illustrates a cross-sectional back view of the handcart.

FIG. 4 illustrates an exploded view of the underside portion of the arm structure of the handcart.

FIG. 5-5C illustrates an alternative embodiment of the present invention, the handcart utilizing a spring arch.

FIG. 6-6A illustrates an alternative embodiment for the elongated bar member.

FIG. 8A-8C illustrates an embodiment of the present invention, the handcart utilizing a second type of spring arch connection.

FIG. 7-7A illustrates an alternative embodiment of the present invention, the handcart utilizing a hook.

IN THE DETAILED SPECIFICATION

Replace the paragraph on Page 3 beginning on line 4

Referring to FIG. 1, there is shown a perspective side view of hand cart (100) according to the present invention. The present invention includes a base frame (110) that is supported by at least one wheel means (113, 114) for movement. In the illustrated embodiment, the base frame (110) is supported by two conventional wheels (113, 114). The hand cart can be made of rigid metal such as aluminum, steel, hard plastic or another such suitable material. As illustrated, base frame (110) further includes an integrated rigid vertical plate member (120) and a rigid horizontal plate member (125). The horizontal plate member (125) is aligned perpendicular to the vertical plate member (120). Conventional wheel means (113, 114) are respectively mounted upon opposite ends of vertical plate member (120) to support the movement of handcart (100). As shown, the conventional wheels (113, 114) are securely fastened to the vertical plate member via screw bolts as illustrated in FIG. 1A. In alternative embodiments of the present invention, as shown in FIG 6A and 6B, wheel means (113, 114) are situated on opposite ends of an axle (115) that runs through the bottom of the elongated bar member (150).

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The illustrated embodiment in FIG. 1A, further includes handle assembly (156) to provide the capability of steering and maneuvering the hand-cart (100). Handle assembly (156) further includes parallel spaced apart support members (161, 162) having their upper ends

connected to grip member (165) and their lower ends securely mounted upon the lower end (160) of bar member (150). As shown, the parallel support members (161, 162) are securely fastened to the lower end (160) of bar member (150) at each opposite side. In the illustrated embodiment, bolt screws securely fastened the support members (161, 162) to the bar member (150). However, other suitable fastening means can be utilized. The handle assembly (156) provides the capability of moving the handcart in a forward and backward position on the conventional axis of the wheel means (113, 114).

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Referring to FIG. 4, the present invention further includes a means for raising and lowering the arm structure (200) such that catch mechanism (240) in the underside portion (220) can securely engage the top of the container. In the illustrated embodiment, a lever mechanism (350) is provided that is situated at the upper end of the bar member (150). Lever mechanism (350) is operably connected through the interior of the bar member (150) to the arm structure (200). The lever mechanism (350) connection allows the arm structure (200) to be vertically lifted and lowered such that the catch mechanism (240) can engage the top of the neck of the container. As illustrated in the alternative embodiment in FIG. 6A, the lever mechanism can be situated internally within the casing of the elongated bar member (150).

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In other embodiments of the present invention, as illustrated in FIG. 3A, carriage block (410) and (440) can be eliminated. In this kind of embodiment as shown in FIG. 6A and 6B, the rod member (400) and the spring member (420) are each respectively attached to screws (401, 402) that horizontally secure arm (200) to the bar member (150).

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In the alternative embodiment of the present invention, as shown in FIG. 5A and 5C, the arm structure (200) can be raised and lowered to at least a thirty-degree angle utilizing a spring-arch method. In this kind of embodiment, the first edge (431) of arm structure (200) is hingedly connected to the exterior of the elongated bar (150) at an intermediate point. In this alternative embodiment, the arm structure (200) is pivoted upward along a thirty-degree angle path as the

cradle engages the bottom of the container. Then, the arm structure (200) is lowered along the same thirty-degree angle path allowing the catch mechanism (240) to engage the top of the container. As depicted FIG. 5A, the arm structure (200) is connected to the elongated bar member (150) through a spring-loaded hinge (430) which allows the arm structure (200) to remain in a down position with the catch mechanism (240) situated within the arm structure (200) securely engaging the top of the container. In the illustrated embodiment, the catch mechanism (240) can be the orifice illustrated in FIG. 5 or the recess (245) illustrated in FIG. 4.

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In the embodiment illustrated in FIG.'s 6A and 6B, lever mechanism (350) further comprises a solid rod (400) which is situated internally within the elongated bar (150). Rod (400) is held in place by special hardware, which allows the rod (400) to slide up and down. As depicted in FIG. 5A, rod (400) is connected to first edge (431) of the arm structure (200) such that lever (350) can be pushed downward to raise the arm structure (200) and disengage the catch mechanism (240) as illustrated in FIG. 5A.

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In FIG.'s 8A-8C, there is shown an alternative embodiment of the present invention utilizing the spring arch method. In this illustrated embodiment in FIG. 8A, lever mechanism (350) is located at the upper end of elongated bar member (150) and is operably connected at an intermediate point (476) to the upper surface of arm structure (200). Referring to FIG. 8C, the first edge (201) of arm structure (200) is hingedly connected to the exterior of elongated bar member (150). In the shown embodiment, cable (475) is connected to arm structure (200) at the intermediate point (476) such that when lever mechanism (350) is pulled upward cable (475) raises arm structure (200) upward. As shown in FIG. 8B, when lever mechanism (350) is pulled upward, the arm structure (200) is raised to at least a thirty degree angle path to disengage catch mechanism (240).